

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/036492

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K48/00 C12N15/87 C12N15/11

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-------------------------|
| X | GOMEZ ET AL.: "Cytoplasmic p21 WAF1/Cip1 protects U937 promonocytic cells from HIV mediated apoptosis" 'Online! 24 May 2002 (2002-05-24), XP002324902 Retrieved from the Internet: URL:WWW.RETROCONFERENCE.ORG/2002/POSTERS/13446.PDF> 'retrieved on 2005-04-13! cited in the application the whole document | 1-6 |
| Y | WO 01/88191 A (THE UNITED STATES OF AMERICA AS REPRESENTED BY THE DEPARTMENT OF VETER) 22 November 2001 (2001-11-22) the whole document | 1-7, 13-18, 24-29 |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

19 April 2005

Date of mailing of the international search report

29.07.2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Fotaki, M

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-------------------------|
| Y | KAWATA SANAE ET AL: "p21Waf1/Cip1/Sdi1 prevents apoptosis as well as stimulates growth in cells transformed or immortalized by human T-cell leukemia virus type 1-encoded Tax." JOURNAL OF VIROLOGY, vol. 77, no. 13, July 2003 (2003-07), pages 7291-7299, XP002324904 ISSN: 0022-538X the whole document | 1-7, 13-18, 24-29 |
| Y | POLJHA WOJCIECH ET AL: "The cyclin-dependent kinase inhibitor p21-WAF1 is required for survival of differentiating neuroblastoma cells" MOLECULAR AND CELLULAR BIOLOGY, vol. 16, no. 4, 1996, pages 1335-1341, XP002325238 ISSN: 0270-7306 the whole document | 1-7, 13-18, 24-29 |
| Y | TIAN HUI ET AL: "p21WAF1/CIP1 antisense therapy radiosensitizes human colon cancer by converting growth arrest to apoptosis" CANCER RESEARCH, vol. 60, no. 3, 1 February 2000 (2000-02-01), pages 679-684, XP002325239 ISSN: 0008-5472 the whole document | 1-7, 13-18, 24-29 |
| A | GARTEL ANDREI L ET AL: "The role of the cyclin-dependent kinase inhibitor p21 in apoptosis" MOLECULAR CANCER THERAPEUTICS, vol. 1, no. 8, June 2002 (2002-06), pages 639-649, XP002325181 ISSN: 1535-7163 | |

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 13-18
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 13-18 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-7, 13-18, 24-29 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7, 13-18, 24-29 (all partially)

Method for attenuating transmission or infection by an immunodeficiency virus by providing an inhibitor of p21 to a cell wherein said inhibitor is a polynucleotide comprising at least 10 contiguous nucleotides of SEQ ID NO:8; a method of treating AIDS by providing the same inhibitor; a pharmaceutical composition comprising the same inhibitor

2. claims: 1-7, 13-18, 24-29 (all partially)

The same as invention 1 but for SEQ ID NO:10

3. claims: 1-4, 8-10, 13-15, 19-21, 24-26, 30-32 (all partially)

The same as invention 1 but for SEQ ID NO:7

4. claims: 1-4, 8-10, 13-15, 19-21, 24-26, 30-32 (all partially)

The same as invention 1 but for SEQ ID NO:9

5. claims: 11, 12, 22, 23, 33, 34 (all entirely); 1-4, 13-15, 24-26 (all partially)

The same as invention 1 wherein said inhibitor is 2-cyano-3, 12-dioxooleana-1,9-dien-28-oic acid (CDDO)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/036492

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| WO 0188191 A | 22-11-2001 | AU 5305101 A | 26-11-2001 |
| | | WO 0188191 A1 | 22-11-2001 |
| | | US 2003144236 A1 | 31-07-2003 |
| | | US 2005043262 A1 | 24-02-2005 |